

AUGUST

at the

CALIFORNIA ACADEMY OF SCIENCES

AUGUST MEETING

DATE: Wednesday evening, August 13
TIME: 8:00 p.m. (One showing only)
PLACE: May Treat Morrison Auditorium
SUBJECT: "THE DAYS THE WORLD WENT MAD"

Natural disasters have wiped out whole islands in a single blast, and swept vast areas clear of buildings and trees, with terrible destruction and loss of life. The world went mad in 1883 when Krakatoa sent a giant tidal wave racing half-way round the globe. In 1923 when 140,000 Japanese died in one earthquake — and again on an April Sunday in 1965 when thirty-seven tornadoes turned mid-west America into a natural disaster area.

Producer Max Morgan-Witts has gathered film from all over the world to put together in this document of natural disaster. Some of its comes from newsreel cameramen, struggling to maintain their balance on a rocking earth, or hanging desperately in a hurricane wind. Some of it was filmed by sheer chance, as was an unique record of the Alaskan earthquake taken by a sailor who started filming some people on a jetty a few seconds before the disaster. The quake struck, the people disappeared, and in those few frenzied moments the sailor let his camera run on uncontrolled before being thrown clear himself.

The film examines precautionary measures — proper construction, adequate warnings — which might lessen the loss of life and property caused by natural disasters.

"THE DAYS THE WORLD WENT MAD" is in black and white and was produced for showing on BBC-TV. One screening only at 8:00. Your 1969 membership card is your admission. Late comers, in case the auditorium is filled, will be invited to enjoy "MARSTRIP" in Morrison Planetarium.

MORRISON PLANETARIUM

"MARSTRIP" continues in the Theatre of the Stars through Labor Day, September 1. The forbidding red planet Mars named for the Roman God of War has fascinated man for centuries. Our summer spectacular sky show, which includes a journey through space, is one not to be missed.

Performances daily at 12:30, 2:00 and 3:30 with late matinees, Saturdays and Sundays, at 5:00 p.m. Evening shows *nightly* at 8:30.

Admission: Adults, \$1.00 with half-price for students (with student body cards), armed services personnel and children under 16.

MORRISON AUDITORIUM

"THE SEA OF CORTEZ", an Academy-produced documentary in color, is presented daily in Morrison Auditorium at 5:30 p.m. The charge of admission is the same as that for the sky shows in Morrison Planetarium.

SPECIAL EXHIBITS

"MEN ON THE MOON", illustrative material on the complete background of the Apollo program loaned to the Academy by officials of the National Aeronautics and Space Administration is on display in Lovell White Hall of Man and Nature. There are reproductions of original paintings by contemporary artists who were commissioned by NASA, many photographs in both black and white and color, charts and diagrams. This exhibit (which continues through August), when viewed in conjunction with the Hohfield Hall of Space Science, is an impressive one indeed.

"A PICTORIAL LOOK AT THE ACADEMY'S EVOLUTION," ground floor, Cowell Hall. A history, in photographs, touching the 116-year emergence of the CAS.

... AND A REMINDER

During the summer (ending Labor Day) all elements of the display areas, including Steinhart Aquarium, open from ten in the morning until nine-thirty at night. Regular hours, ten to five, will resume September 2.

NEWS and NOTES

ON JUNE 18, E. Morris Cox, Chairman of the Board of Trustees announced the election of two prominent San Francisco businessmen to that board. They are Rudolph A. Peterson,

(Continued on reverse)

It is with pleasure that we announce the initiation of a Docent program for the Academy. The purpose of the program is to provide well-trained volunteer tour guides for certain exhibit and display areas. It is a fulfillment of a recognized need to increase the value of visits by students and other groups to the Academy.

The initial training session will begin on October first. There will be ten sessions of two hours each on Wednesday mornings. Attendance at all sessions will be required. The course will be taught by the Academy staff and will be concerned with the contents of North American Bird and Mammal Halls, their habitat groups and other displays. As the project evolves other departments of the Academy will be included in the program.

The first Docent class will be limited to twenty-five. Academy membership is required for all Docents. Applicants must have an individual interview with representatives of the Docent Council. Docents must be willing to serve the Academy for two years after completion of the course, one-half day every other week. There is a fee of \$20.00 for the course.

THE ACADEMY NEEDS YOU! If you have the urge, the interest and the time to become part of this fine and gratifying service complete the attached application and mail immediately to the Docent Council. Deadline for applications is September fifteenth.

To apply for training as a Docent fill out this application and mail to:

Docent Council
California Academy of Sciences
Golden Gate Park
San Francisco, California 94118

Name..... (first)..... (last)..... (husband's)
Address.....
City..... Zip.....
Telephone.....
I am interested in taking the first course in October, 1969.....; or a later course in the spring of 1970.....
My particular field(s) of interest:.....

The Docent office will be open on August 18th and interviews will be scheduled in September. We will contact you and arrange for an interview.

Meet The Staff . . .



Photo by Lloyd Ullberg

RICHARD L. SHOPEN, Aquatic Biologist with Steinhart Aquarium, has been preoccupied with diving and what's under the water since a very young man . . . having begun exploring and spelunking in the lakes and caves of the Midwest where he was born. He attended the University of Missouri for two years majoring in comparative animal behavior and animal psychology which he furthered for an additional two years at the University of Hawaii on Oahu. In between these two sessions he spent a year in Mexico enjoying the coastal cities and continuing his exploration of things aquatic.

On his return to the United States in 1964, he remained several months in the Bay Area and then returned to the University of Missouri for additional study. Then, the pull of San Francisco became too strong and he returned where he has remained since. Prior to coming to the Academy in the autumn of 1967, he had various jobs alien to his training and was happy when he could once again be involved with the animals he loved. His particular job at Steinhart is the training and feeding of the aquatic mammals: four white-sided dolphins, three freshwater dolphins, a bottlenose, a manatee and a harbor seal. He keeps a practiced weather eye on their health, their behavioral patterns, capabilities, aptitudes and general abilities. It is interesting to note that the large dolphin tank is basically a matriarchy, dominated — not as you might suspect — by the only male but by the eldest female who has made it patently obvious that she is in charge.

Richard continues his skin diving the year 'round as he can — going to Mexico on occasion and to local coastal areas more often. A selective reader, his taste ranges from R. H. Bluth to Samuel Beckett to Konrad Lorenz and N. Tinbergen, two ethnologists who hold a great fascination. All sorts of music are for him — from classical to rock — and he can strum both a banjo and the guitar.

President of the Bank of America, and Frank E. Hayward, Vice President of Coldwell Banker & Co. Mr. Hayward is a Vice President of SPUR (San Francisco Planning and Urban Renewal Association). Mr. Peterson, an internationally-known banking executive, is a Trustee and the Treasurer of the San Francisco Museum of Art.

READERS OF THE NEWSLETTER may be interested in the fact that the official attendance figure for the fiscal year 1968-1969 for all elements of the Academy is 2,723,452. The grand total attendance documented for the CAS since Steinhart Aquarium reopened its doors after the remodeling completed in June 1963 is 17,870,448 — for an average annual attendance of nearly three million persons. This would indicate that we must have *something* to offer and must be doing *something* right!

THE ACADEMY, during the summer months, was proud to be part of a training program which was originated by the Chinatown North Beach Area Youth Council, Inc. in San Francisco. CATS was its title — an acronym for Community Awareness Through Science. Twenty five young people participated in the program throughout the CAS. The objectives of the worthwhile effort were to help youths living in a disadvantaged environment in San Francisco develop an awareness of the problems and needs of their community which can be controlled or alleviated through science, and to learn of work opportunities in the scientific field.

The participants individually worked 30 hours a week in the mornings and during the afternoons attended science workshops and went on field trips to various scientific institutions. The program was subsidized by the Federal Government.

ONCE AGAIN, the staff of Morrison Planetarium is presenting three courses devoted to the ever-expanding world of astronomy beginning in September:

CELESTIAL NAVIGATION. A 16-week course commencing September 9. Tuesdays 7:30 to 9:30 p.m. Instructor, Captain David W. Todd, U.S.N. (Ret.). The principles of celestial navigation, how to chart a position on the high seas by using the stars, planets, sun and moon. Enrollment fee is \$30.00 plus about \$13.00 for supplies.

OBSERVATIONAL ASTRONOMY. A 10-12-week course commencing September 16. Tuesdays 7:30 to

9:30 p.m. Instructor, Mr. Michael A. Bennett. Find out what to look for in the sky, a beginner's approach to observing the heavens. The use of telescopes, binoculars and *your* pair of interested eyes. Enrollment, \$18.00.

STRUCTURE OF THE UNIVERSE. A 15-week course commencing September 8. Mondays 7:30 to 9:30 p.m. Instructor, Mr. Edwin L. Duckworth. Contemporary astronomical problems in an introduction to stellar astronomy including cosmology, planetary formation and evolution and considerations of life in the universe, each lecture a self-contained presentation. Enrollment fee is \$25.00.

Interested persons may register at any of the first three meetings of the indicated courses.

NEW SCIENTIFIC PUBLICATIONS
OF THE
CALIFORNIA ACADEMY OF SCIENCES

Occasional Papers

- "The Use of Copper Sulfate as a Medicament for Aquarium Fishes and as an Algaecide in Marine Mammal Water Systems". Robert P. Dempster and William H. Shipman. No. 71. June 6, 196925c
- "Pyrgopyxis, a New Genus of Diatoms from a South Atlantic Eocene Core". N. Ingram Hendey. No. 72. June 6, 1969.25c
- "A New Pipefish from the Virgin Islands, *Micrognathus dawsoni*". Earl S. Herald. No. 73. June 6, 1969.25c
- "Additional Records of *Tetrabalanus polygenus* Cornwall, 1961 (Cirripedia, Thoracica)". Victor A. Zullo. No. 74. June 6, 1969.25c

NEW MEMBERS OF THE ACADEMY

Regular Members

- | | |
|--------------------------|----------------------------|
| Mr. Richard Dale Castro | Mr. Mark Littorin |
| Mr. William W. Davis | Mr. George A. Logvy |
| Mrs. Gaye H. Eisenlord | Mr. David E. Lombardi, Jr. |
| Miss Phyllis J. Ensrud | Mr. Richard Miller, Jr. |
| Mr. Kent Erskine | Mr. Jack Murphy |
| Mr. Theodore F. Evanicki | Mr. Crede A. Oilar |
| Mrs. Jennifer W. Harris | Mrs. Jordan F. Smith |
| Mr. Howell P. Hughes | Mrs. Q. M. Stephen-Hassard |

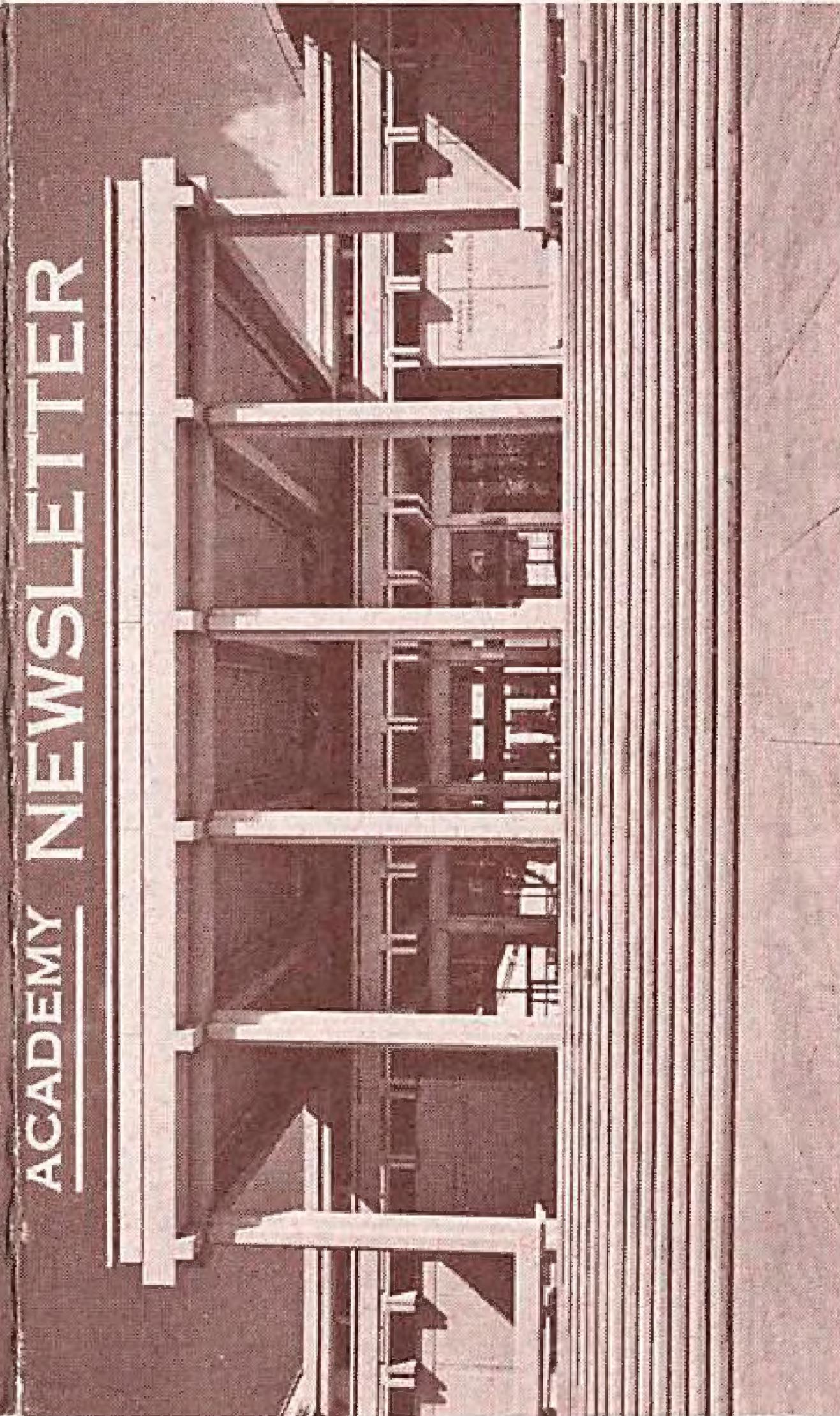
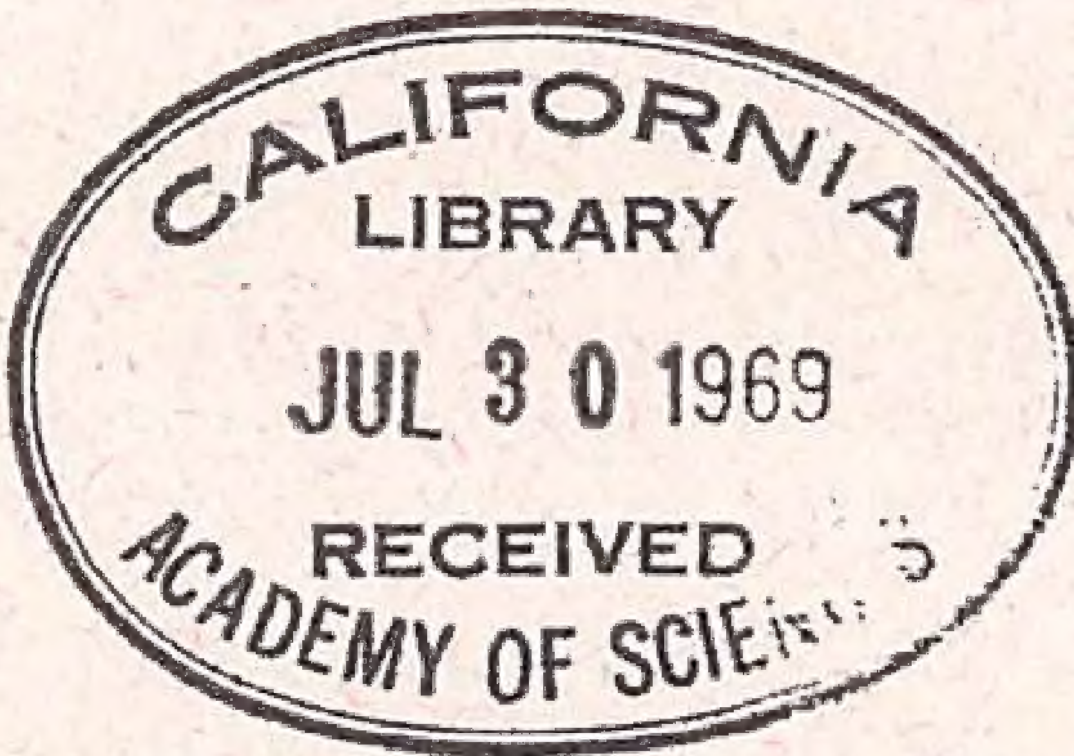
Family Members

- | | |
|---------------------------|-----------------------------|
| Mr. A. R. Baker | Mr. & Mrs. Douglas Martin |
| Mrs. Leonard Bishop | Mr. & Mrs. Herbert A. Moore |
| Dr. Peter R. Dallman | Mrs. Robert W. McKay |
| Mr. & Mrs. James W. Green | Mrs. Alan Nichols |
| Dr. & Mrs. John H. Jolly | Mr. Hugh Palmerston |
| Mr. Morrey L. Klein | Mr. Steven B. Snyder |
| Mrs. Richard F. Larkin | Mr. Albert M. Zecher |
| Mr. & Mrs. W. A. Lerond | Mr. Clerin W. Zumwalt |

GRAPHIC
ARTS
OF MARIN INC.

Non-Profit Organization
U. S. POSTAGE
PAID
San Francisco, Calif.
Permit No. 7544

Ref
Q 11
C22
no. 356



No. 356 — Published Monthly by the

CALIFORNIA ACADEMY OF SCIENCES
GOLDEN GATE PARK • SAN FRANCISCO 94118

AUGUST 1969

SPECIAL ANNOUNCEMENT INSIDE!